A NEW GENUS AND SPECIES OF PYRALINAE FROM AFRICA

(LEPIDOPTERA, PYRALIDAE)

By

PAUL E.S. WHALLEY
(British Museum (Natural History))

Amongst material recently submitted for determination by Mr. R.H. Carcasson of the Coryndon Museum, Nairobi, was a series of a remarkable new Pyralid. This was believed to be the second known species of the genus Macna Walker (Chrysauginae) from Africa. This subfamily is primarily New World in distribution, with a few species, perhaps doubtfully included, from the Old World. Of the Old World species, Macna hampsoni Distant is known from Africa together with one or two other species.

When the holotype of Macna hampsoni Distant was re-examined it was found that it shared characters which were given in Hampson's definition of the two subfamilies, Pyralinae and Chrysauginae, (Hampson 1896, Trans. ent. Soc. Lond. 1896: 451, and 1897, Proc. zool. Soc. Lond. 1897: 633). In the hind wing Sc + R and Rs approximate but do not anastomose, the maxillary palps and proboscis are small and a chaetosema is absent. Comparison of the holotype of M. hampsoni and the new species with the holotype of Macna pomalis Walker (type species of Macna Walker) showed that while the former two species were congeneric they were not congeneric and probably not in the same subfamily with M. pomalis Walker. I am therefore proposing a new genus for M. hampsoni and the new species, and in spite of some overlap in characters, am placing it in the Pyralinae.

MITTONIA gen. n.

Forewings with R3 reduced or absent: abdomen with tympanal organs simple: chaetosema absent: ocelli present. Male genitalia with swelling on the basal part of costa of valve: gnathus enlarged at junction of arms: uncus turned ventrad from base: female with long anal papillae: bursa covered with small spines: signum absent. Type species, Mittonia carcassoni sp. n.

I am transferring M. hampsoni Dist. to the Pyralinae and placing it in the genus Mittonia Whalley. (Mittonia hampsoni Distant, comb.n.).

The exact relationship of this genus to others in the Pyralinae will have to await a detailed study of the subfamily. Tentatively I am placing it near Xenomilia Warren. It can be distinguished from Xenomilia by the absence of R3 in the forewing and the short labial palps (1½ - 2 x diameter of eye in Macna, 3 - 4 x diameter of eye in Xenomilia)

MITTONIA CARCASSONI sp.n.

Holotype ♂, Wing 22 mm. (centre mesothorax to apex of forewing).

Head: Frons flattened, proboscis small; labial palps 1½ x diameter of eye; scales on head reddish brown.
Thorax: Patagia similarly coloured; tegulae reaching base of hindwing, greyer than thorax.
Abdomen: Yellowish brown, no conspicuous markings.
Legs: Fore and mid legs reddish brown, long scales on dorsal side of fore tibia, very long scales on mid tibia: hindlegs yellowish brown, long scales on tibia.

Upperside

Forewing: General colour olive green with brown basal area. Pattern as figured. Costal margin sinuate, apex projecting: terminal margin incised anteriorly, slightly sinuate posteriorly: terminal line dark green interspersed with brown scales giving a brown-edged appearance to terminal margin. Subterminal area olive green with reddish brown scales over veins; subterminal fascia a pale line, strongly serrate; two white scale patches between 1a and Cu2 and Cu2 and Cu1, anterior patch largest: dark olive patch in median area: antemedial line angled from basal third of hind margin to median area of cell: white, edged with black, finger-like shape on median area; scales in this area light brown, interspersed with reddish brown and a few mauve scales: outline on finger process continued towards costa with smaller tooth: before reaching costa line darkens and thickens: basal area reddish brown: hind margin slightly sinuate.

Hindwing: General colour olive green, margin brown: subterminal line strongly serrate: median area olive green: median fascia pale: basal area olive green interspersed with white scales giving paler appearance than median area: prominent tuft of black scales on hind margin.

Underside:

Forewing: General colour reddish brown; large patch of scent scales on base of cell; long hair-like scales over most of cell; white patches between veins 1a, Cu2 and Cu1 prominent, anterior one almost spherical.

Hindwing: As forewing but without white spots: inner hind margin strongly irrorate with white scales: submedian fascia a pale line of scales posteriorly, darkening anteriorly.

Allotype ♀, Wing 24 mm. Labial palps 2 x diameter of eye.

Upperside: General colour reddish brown, irrorate with darker scales: pattern as figured. Antemedial line angled from basal third of hindwing to median area, widening anteriorly to form olive green patch: two white patches between 1a, Cu2 and Cu1 present in ♂ are largely obscured in ♀ by dark scales.

Underside: Fore and hindwings general colour reddish brown. Costa of forewing paler olive green: two white spots conspicuous between 1a, Cu2 and Cu1: forewing with long hair-like scales over cell: scent patch on forewing and scale tuft on hindwing absent.

Genitalia: ♂ fig.3 The most striking feature is the strongly reflexed uncus and the heavily sclerotised patch of tooth-like scales on the basal part of the valve.
♀ fig.4 The opening of the ductus bursa and the bursa itself are covered with small spines.

Variation from holotype specimen:

♂ Wing 20 - 24 mm. (8 examples) There is little variation in pattern but the olive green colour tends to fade to a more uniform brown.
♀ Wing 24 - 25 mm. (5 examples) The coloration tends to be paler in the older specimens, otherwise little variation is present in the material examined.

Materia examined:

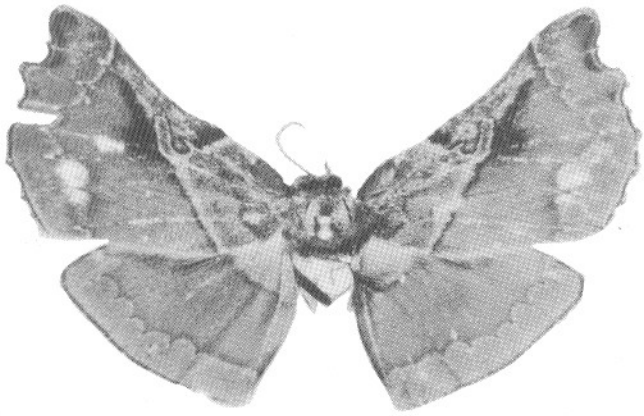
Holotype ♂, Uganda, Entebbe, March 1961, N. Mitton, in British Museum (Natural History.) (fig. 1)
Allotype ♀, Uganda, Entebbe, March 1961, N. Mitton, in British Museum (Natural History). (fig. 2)
Paratypes 1 ♂, One specimen, data as type in Coryndon Museum, Nairobi.
3 ♂, Uganda, Entebbe, Feb. 1962, D. Bartlett, in Coryndon Museum, Nairobi.
1 ♂, Cameroons, Bitje, Ja River, S. Cameroons, April June 1910, G.L. Bates, in British Museum (Natural History)
1 ♂, Cameroons, Bitje, Coll. W. Schaus, in American Museum of Natural History, New York.
1 ♀, Uganda, Entebbe, Sept. 1954, J.A. Burgess, in Coryndon Museum, Nairobi.
2 ♀, Uganda, Entebbe, Feb. 1962, D. Bartlett, in Coryndon Museum, Nairobi.

M. carcassoni can easily be distinguished from its closest relative Mittonia hampsoni Distant by the general shape and the olive green colour which contrasts with the bright green of M. hampsoni. The uncus of the male of M. hampsoni is long and thin and this species lacks the prominent sclerotised scale group on the base of the valve. The female M. hampsoni has shorter anal papillae and the bursa opening is simpler than in M. carcassoni.

Acknowledgement

The author wishes to express his thanks to Mr. M. Shaffer for drawing figures 3 and 4.

(Received for publication 18th. April 1964)

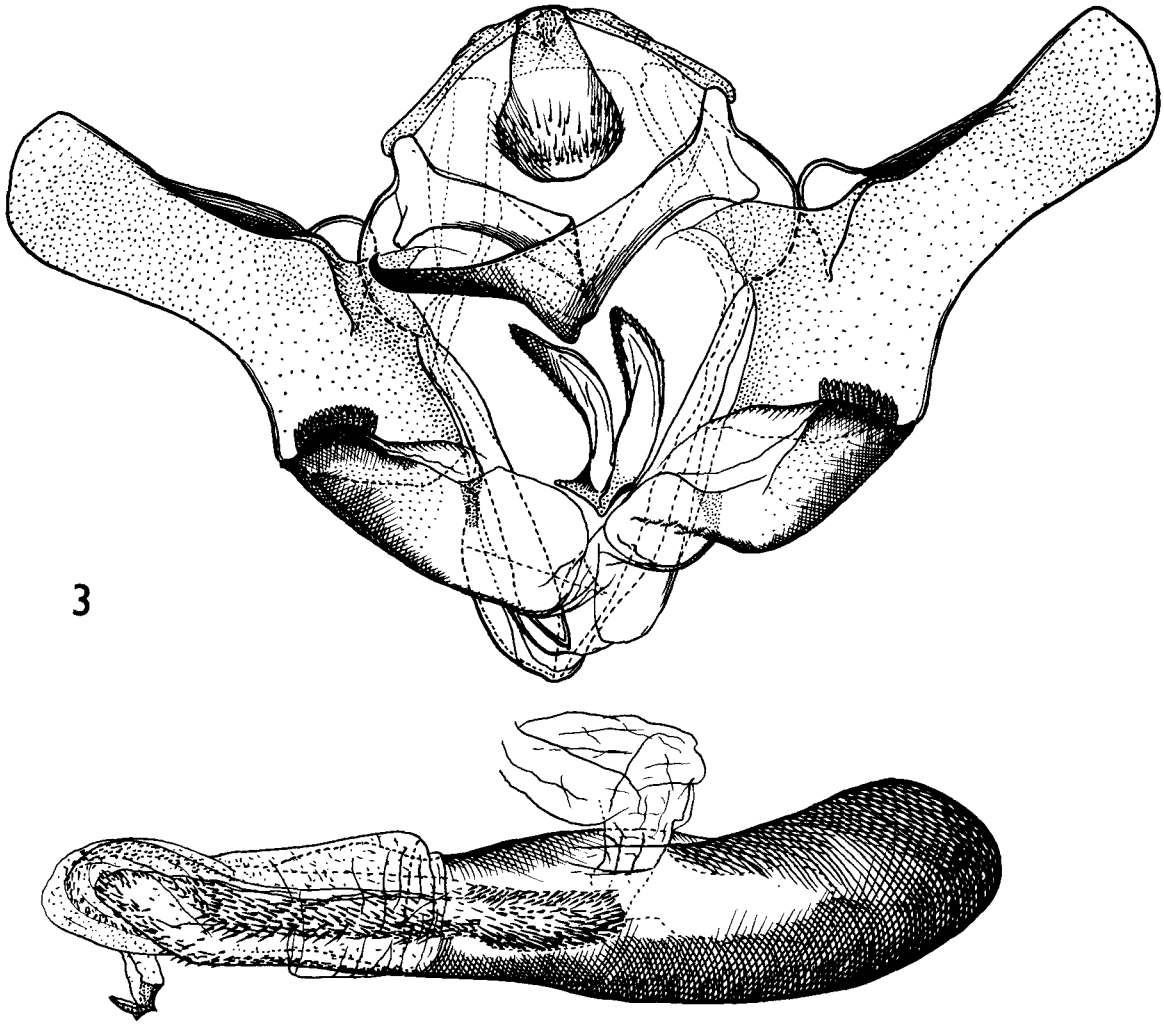


1

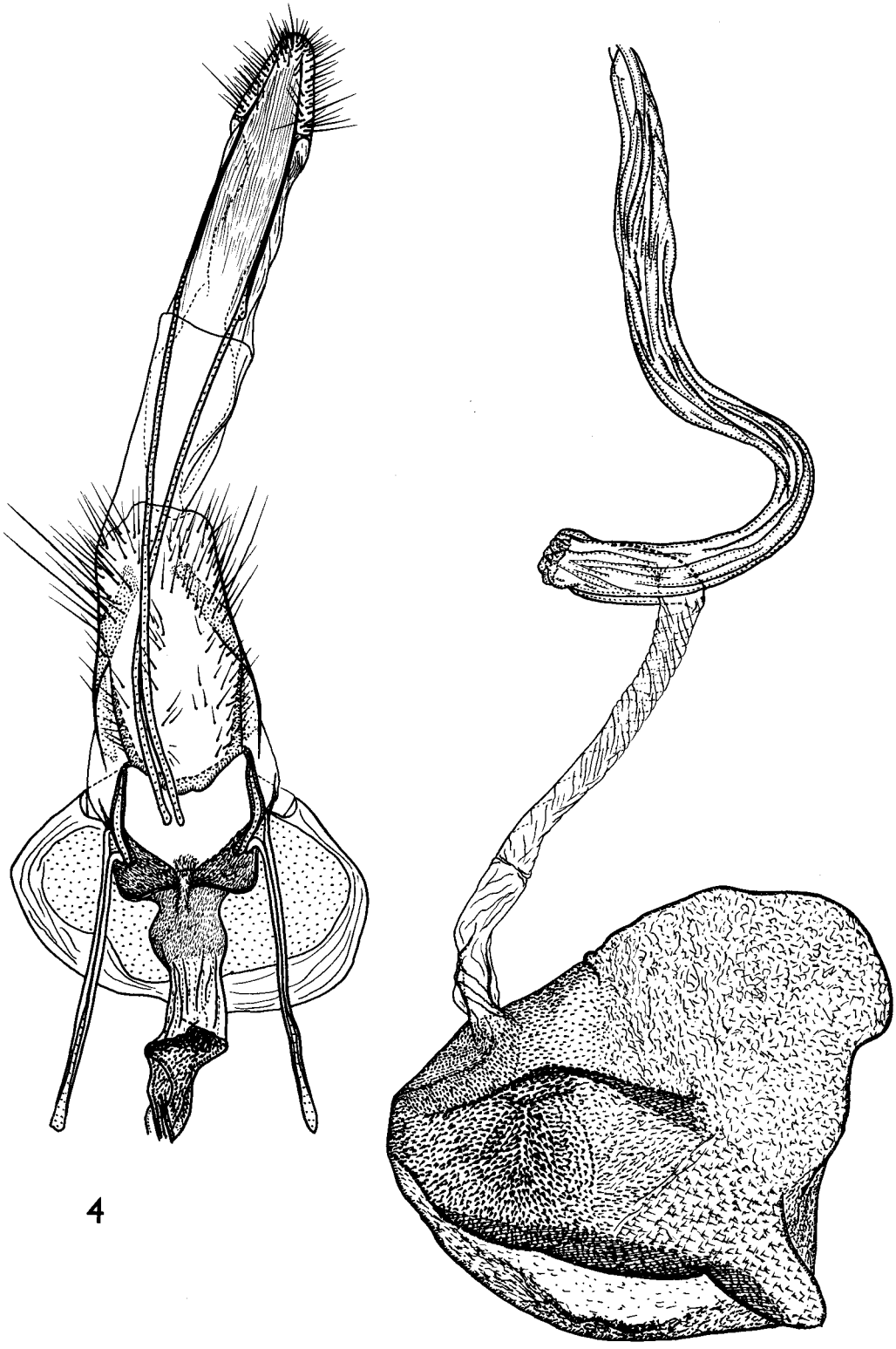
MITTONIA CARCASSONI Whalley ♂

2

MITTONIA CARCASSONI Whalley ♀



MITTONIA CARCASSONI Whalley : male genitalia



4

MITTONIA CARCASSONI Whalley : female genitalia